| | SECTION 1 | |
|---|--|--------|
| PRODUCT IDENTIF DATE OF PREPARA PRODUCT USE | FIER SZM020517 ROCKET DRY ENAMEL - BLACK ATION MAY 18, 2004 PROTECTIVE COATING | K 517 |
| MANUFACTURED BY | ICI PAINTS NORTH AMERICA, 925 EUCLID AVENUE, CLEVELAND, OHIO 44115, U.S.A. ICI PAINTS (CANADA), 8200 KEELE STREET, CONCORD, ONTARIO L4K 2A5, CANADA. | |
| EMERGENCY AND M | ISDS TELEPHONE NUMBER: 1-800-545-2643 | |
| MSDS PREPARED B | PRODUCT SAFETY AND TOXICOLOGY DEPARTMENT ICI PAINTS NORTH AMERICA | |
| | SECTION 2: COMPOSITION/INFORMATION ON INGRE | DIENTS |
| | INGREDIENT | WT.%: |
| CHEMICAL NAME COMMON NAME : CAS NUMBER: | | 40-50 |
| CHEMICAL NAME COMMON NAME : CAS NUMBER: | | 1~5 |
| CHEMICAL NAME COMMON NAME : CAS NUMBER: | | 5-10 |
| | CARBON BLACK CARBON BLACK 1333-86-4 | 1-5 |
| COMMON NAME : | SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC LIGHT ALIPHATIC SOLVENT NAPHTHA (PETROLEUM) 64742-89-8 | 40-50 |

SECTION 3: HAZARDS IDENTIFICATION

PRIMARY ROUTE(S) OF EXPOSURE

INHALATION, SKIN CONTACT, EYE CONTACT, INGESTION.

EFFECTS OF OVEREXPOSURE

PROLONGED INHALATION MAY LEAD TO LOSS OF APPETITE, FATIGUE, INHALATION

DROWSINESS, DIZZINESS AND/OR LIGHTHEADEDNESS, HEADACHE, UNCOORDINATION, NAUSEA, VOMITING, BLURRED VISION, COUGHING, DIFFICULTY WITH SPEECH, CENTRAL NERVOUS SYSTEM DEPRESSION, INTOXICATION, TIGHTNESS OF CHEST, ANESTHETIC EFFECT OR

NARCOSIS, DIFFICULTY OF BREATHING, TREMORS, LIVER DAMAGE, KIDNEY DAMAGE, LOSS OF CONSCIOUSNESS, RESPIRATORY FAILURE,

ASPHYXIATION, DEATH.

SKIN CONTACT IRRITATION OF SKIN. PROLONGED OR REPEATED CONTACT CAN CAUSE

DERMATITIS, DEFATTING, BLISTERING.

EYE CONTACT IRRITATION OF EYES. PROLONGED OR REPEATED CONTACT CAN CAUSE

CONJUNCTIVITIS, BLURRED VISION, TEARING OF EYES, REDNESS OF EYES, SEVERE EYE IRRITATION.

INGESTION INGESTION MAY CAUSE LUNG INFLAMMATION AND DAMAGE DUE TO

ASPIRATION OF MATERIAL INTO LUNGS, DIZZINESS AND/OR

LIGHTHEADEDNESS, HEADACHE, UNCOORDINATION, NAUSEA, VOMITING,

DIARRHEA, GASTRO-INTESTINAL DISTURBANCES, CENTRAL NERVOUS SYSTEM DEPRESSION, INTOXICATION, DIFFICULTY OF BREATHING,

LIVER DAMAGE, KIDNEY DAMAGE, PULMONARY EDEMA.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

EYE, SKIN, RESPIRATORY DISORDERS, ASTHMA-LIKE CONDITIONS,

SECTION 4: FIRST-AID MEASURES

INHALATION

REMOVE TO FRESH AIR. RESTORE AND SUPPORT CONTINUED

BREATHING.

GET EMERGENCY MEDICAL ATTENTION.

HAVE TRAINED PERSON GIVE OXYGEN IF NECESSARY. GET MEDICAL

HELP FOR ANY BREATHING DIFFICULTY.

REMOVE TO FRESH AIR IF INHALATION CAUSES EYE WATERING,

HEADACHES, DIZZINESS, OR OTHER DISCOMFORT.

SKIN CONTACT

WASH THOROUGHLY WITH SOAP AND WATER. IF ANY PRODUCT REMAINS, GENTLY RUB PETROLEUM JELLY, VEGETABLE OR MINERAL/BABY OIL

ONTO SKIN. REPEATED APPLICATIONS MAY BE NEEDED. REMOVE CONTAMINATED CLOTHING.

WASH CONTAMINATED CLOTHING BEFORE RE-USE.

EYE CONTACT

FLUSH IMMEDIATELY WITH LARGE AMOUNTS OF WATER, ESPECIALLY UNDER LIDS FOR AT LEAST 15 MINUTES. IF IRRITATION OR OTHER

EFFECTS PERSIST, OBTAIN MEDICAL TREATMENT.

INGESTION

IF SWALLOWED, OBTAIN MEDICAL TREATMENT IMMEDIATELY.

SECTION 5: FIRE-FIGHTING MEASURES

FLASH POINT (SETA)

80 F./ 27 C. LOWER EXPLOSIVE LIMIT UPPER EXPLOSIVE LIMIT 7.0

1.1

(왕) (왕)

FIRE EXTINGUISHING MEDIA

DRY CHEMICAL OR FOAM

WATER FOG.

CARBON DIOXIDE.

JNUSUAL FIRE AND EXPLOSION HAZARDS

CLOSED CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT

VAPORS MAY IGNITE EXPLOSIVELY AT AMBIENT TEMPERATURES.

VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL LONG DISTANCES TO A SOURCE OF IGNITION AND FLASH BACK.

VAPORS CAN FORM EXPLOSIVE MIXTURES IN AIR AT ELEVATED TEMPERATURES.

CLOSED CONTAINERS MAY BURST IF EXPOSED TO EXTREME HEAT OR

SECTION 5: FIRE-FIGHTING MEASURES

FIRE.

MAY DECOMPOSE UNDER FIRE CONDITIONS EMITTING IRRITANT AND/OR TOXIC GASES.

FIRE FIGHTING PROCEDURES

WATER MAY BE USED TO COOL AND PROTECT EXPOSED CONTAINERS. FIREFIGHTERS SHOULD USE FULL PROTECTIVE CLOTHING, EYE PROTECTION, AND SELF-CONTAINED BREATHING APPARATUS.

HAZARDOUS DECOMPOSITION OR COMBUSTION PRODUCTS
CARBON MONOXIDE, CARBON DIOXIDE, TOXIC GASES.

SECTION 6 ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED COMPLY WITH ALL APPLICABLE HEALTH AND ENVIRONMENTAL REGULATIONS.

ELIMINATE ALL SOURCES OF IGNITION. VENTILATE AREA.
VENTILATE AREA WITH EXPLOSION-PROOF EQUIPMENT. SPILLS MAY
BE COLLECTED WITH ABSORBENT MATERIALS. USE NON-SPARKING
TOOLS. EVACUATE ALL UNNECESSARY PERSONNEL. PLACE COLLECTED
MATERIAL IN PROPER CONTAINER.

COMPLETE PERSONAL PROTECTIVE EQUIPMENT MUST BE USED DURING CLEANUP.

LARGE SPILLS - SHUT OFF LEAK IF SAFE TO DO SO. DIKE AND CONTAIN SPILL. PUMP TO STORAGE OR SALVAGE VESSELS. USE ABSORBENT TO PICK UP EXCESS RESIDUE. KEEP SALVAGEABLE MATERIAL AND RINSE WATER OUT OF SEWERS AND WATER COURSES. SMALL SPILLS - USE ABSORBENT TO PICK UP RESIDUE AND DISPOSE OF PROPERLY.

SECTION 7 HANDLING AND STORAGE

HANDLING AND STORAGE

STORE BELOW 80F.

STORE IN ORIGINAL CONTAINERS. ISOLATED STORAGE IS DESIRABLE.

KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAME.

OTHER PRECAUTIONS

USE ONLY WITH ADEQUATE VENTILATION. DO NOT TAKE INTERNALLY. KEEP OUT OF REACH OF CHILDREN. AVOID CONTACT WITH SKIN AND EYES, AND BREATHING OF VAPORS. WASH HANDS THOROUGHLY AFTER HANDLING, ESPECIALLY BEFORE EATING OR SMOKING. KEEP CONTAINERS TIGHTLY CLOSED AND UPRIGHT WHEN NOT IN USE.

AVOID CONDITIONS WHICH RESULT IN FORMATION OF INHALABLE PARTICLES SUCH AS SPRAYING OR ABRADING (SANDING) PAINTED SURFACES. IF SUCH CONDITIONS CANNOT BE AVOIDED, USE APPROPRIATE RESPIRATORY PROTECTION AS DIRECTED UNDER

EXPOSURE CONTROLS/PERSONAL PROTECTION.

EMPTY CONTAINERS MAY CONTAIN HAZARDOUS RESIDUES.

GROUND EQUIPMENT WHEN TRANSFERRING TO PREVENT ACCUMULATION

OF STATIC CHARGE.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

COMMON NAME : ETHYLBENZENE

CAS NUMBER: 100-41-4

ACGIH (TWA):

100 PPM OSHA (TWA):

100 PPM

ACGIH (STEL):

125 PPM

COMMON NAME : XYLENE

CAS NUMBER:

1330-20-7

ACGIH (TWA):

100 PPM

OSHA (TWA):

100 PPM

ACGIH (STEL):

150 PPM

COMMON NAME : CARBON BLACK

CAS NUMBER:

1333-86-4

ACGIH (TWA):

3.5

MG/M3 OSHA(TWA): 3.5 MG/M3

COMMON NAME : LIGHT ALIPHATIC SOLVENT NAPHTHA (PETROLEUM)

CAS NUMBER: 64742-89-8

OSHA (TWA): 300 PPM

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION

CONTROL ENVIRONMENTAL CONCENTRATIONS BELOW APPLICABLE EXPOSURE STANDARDS WHEN USING THIS MATERIAL. RESPIRATORY PROTECTION IS DETERMINED TO BE NECESSARY, USE A NIOSH/MSHA (CANADIAN Z94.4) APPROVED ELASTOMERIC SEALING-SURFACE FACEPIECE RESPIRATOR OUTFITTED WITH ORGANIC VAPOR CARTRIDGES AND PAINT SPRAY (DUST/MIST) PREFILTERS. DETERMINE THE PROPER LEVEL OF PROTECTION BY CONDUCTING APPROPRIATE AIR MONITORING. CONSULT 29CFR1910.134 FOR SELECTION OF RESPIRATORS (CANADIAN 294.4).

VENTILATION

PROVIDE DILUTION VENTILATION OR LOCAL EXHAUST TO PREVENT BUILD-UP OF VAPORS. USE EXPLOSION-PROOF EQUIPMENT. USE NON-SPARKING EQUIPMENT.

PERSONAL PROTECTIVE EQUIPMENT

EYE WASH, SAFETY SHOWER, SAFETY GLASSES OR GOGGLES. IMPERVIOUS GLOVES, IMPERVIOUS CLOTHING, APRON, BOOTS.

20 July 10 Jul SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

VAPOR PRESSURE: BOILING RANGE (F/C): 148-293/ 64-145 WEIGHT PER GALLON:

NOT AVAILABLE

SPECIFIC GRAVITY:

.908 7.56/ 9.08IMP

%VOLATILE BY VOLUME:

57.57

PHYSICAL STATE:

LIQUID

APPEARANCE

BLACK

SOLUBILITY IN WATER: NOT AVAILABLE PH: NOT AVAILABLE

INDER NORMAL CONDITIONS

SEE SECTION 5 FIRE FIGHTING MEASURES

SECTION 10: STABILITY AND REACTIVITY

SECTION 10: STABILITY AND REACTIVITY

MATERIALS TO AVOID

OXIDIZERS, ACIDS, BASES, AMINES, NITRIC ACID.

NITRATES.

CONDITIONS TO AVOID

ELEVATED TEMPERATURES, CONTACT WITH OXIDIZING AGENT, SPARKS, OPEN FLAME, IGNITION SOURCES.

HAZARDOUS POLYMERIZATION

WILL NOT OCCUR

SECTION 11: TOXICOLOGICAL INFORMATION

COMMON NAME : ALKYD RESIN

CAS NUMBER: CONFIDENTIAL

CARCINOGENICITY LISTED BY: NTP NO IARC NO OSHA NO ACGIH NO

COMMON NAME : ETHYLBENZENE

CAS NUMBER: 100-41-4

CARCINOGENICITY LISTED BY: NTP NO IARC YES 2B OSHA NO ACGIH YES A3

LD50: 3500.00 MG/KG ORL RAT LD50: 2272.00 MG/KG IPR MOU LD50: 17.80 GM/KG SKN RBT

COMMON NAME : XYLENE CAS NUMBER: 1330-20-7

CARCINOGENICITY LISTED BY: NTP NO IARC NO OSHA NO ACGIH NO

LD50:>1700.00 MG/KG SKN RBT LD50: 4300.00 MG/KG ORL RAT LC50: 5000.00 PPM/4HR IHL RAT

COMMON NAME : CARBON BLACK

CAS NUMBER: 1333-86-4

CARCINOGENICITY LISTED BY: NTP NO IARC YES 2B OSHA NO ACGIH NO

LD50:> 10.00 GM/KG ORL RAT

COMMON NAME : LIGHT ALIPHATIC SOLVENT NAPHTHA (PETROLEUM)

AS NUMBER: 64742-89-8

ARCINOGENICITY LISTED BY: NTP NO IARC NO OSHA NO ACGIH NO

SECTION 11: TOXICOLOGICAL INFORMATION

LD50:> 3.16 GM/KG SKN RBT LD50:> 5.00 GM/KG ORL RAT

SUPPLEMENTAL HEALTH INFORMATION

CONTAINS A CHEMICAL THAT IS MODERATELY TOXIC BY INGESTION. CONTAINS A CHEMICAL THAT MAY BE ABSORBED THROUGH SKIN. NOTICE - REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

OTHER EFFECTS OF OVEREXPOSURE MAY INCLUDE TOXICITY TO LIVER, KIDNEY, LUNGS, CENTRAL NERVOUS SYSTEM, BLOOD.

CARCINOGENICITY

THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC) HAS CLASSIFIED CARBON BLACK AS POSSIBLY CARCINOGENIC TO HUMANS (GROUP 2B) BASED ON SUFFICIENT EVIDENCE IN ANIMALS AND INADEQUATE EVIDENCE IN HUMANS.

THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC) HAS EVALUATED ETHYLBENZENE AND CLASSIFIED IT AS A POSSIBLE HUMAN CARCINOGEN (GROUP 2B) BASED ON SUFFICIENT EVIDENCE FOR CARCINOGENICITY IN EXPERIMENTAL ANIMALS, BUT INADEQUATE EVIDENCE FOR CANCER IN EXPOSED HUMANS.

IN A 2 YEAR INHALATION STUDY CONDUCTED BY THE NATIONAL TOXICOLOGY PROGRAM (NTP), ETHYLBENZENE VAPOR AT 750 PPM PRODUCED KIDNEY AND TESTICULAR TUMORS IN RATS AND LUNG AND LIVER TUMORS IN MICE. GENETIC TOXICITY STUDIES SHOWED NO GENOTOXIC EFFECTS. THE RELEVANCE OF THESE RESULTS TO HUMANS IS NOT KNOWN.

REPRODUCTIVE EFFECTS

HIGH EXPOSURES TO XYLENE IN SOME ANIMAL STUDIES, OFTEN AT MATERNALLY TOXIC LEVELS, HAVE AFFECTED EMBRYO/FETAL DEVELOPMENT. THE SIGNIFICANCE OF THIS FINDING TO HUMANS IS NOT KNOWN.

| | | | | | 402 0517 | PAGE | Š |
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| | SECTION | 11: TOXIO | COLOGICA | THEORMAT | | | |
| MUTAGENICITY | NO MUTAG | ENIC EFFE | CTS ARE | ANTICIPAT | ED | Vid Lam, Ann Ann Ann Ann Ann | *** |
| TERATOGENICITY | NO TERAT | OGENIC EF | FECTS A | RE ANTICIP | ATED | | |
| *********** | SECTION | 12: ECOLO | GICAL IN | VFORMATION | and and the first one can have seen and the first seen and the seen has been seen and the | | _ |
| | NO ECOLOG | GICAL TEST AS A WHOLI | FING HAS | BEEN DONE | BY ICI PAINTS ON | THIS | - |
| ~~~~~~~~~~~ | SECTION 1 | 3: DISPOS | NATI COMP | TDEKALTONS | | | |
| | | N ACCORDA | NCE WIT | U ATT Enne | ICABLE REGULATIONS | • | |
| | SECTION 1 | 4: TRANSP | OKT TME | JKMATION | | | |
| DOT | PAINT, 3, | | | en dan gan tip mit mer met men ten ten ten : | om den elle just var for den ent ent för tille till pår elle var men men just | T THE ME AND SAN CO | |
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| | SECTION 15 | : REGULAT | ORY INFO | ORMATION | that the later and the first that the later and | the see the see the see | |
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| | | SARA SARA 302 313 | 302.4 | HAZ AIR POLLUTANT | MARINE POLTNT | | |
| | -41-4 YLBENZENE | NO YES | YES | YES | NO | | |
| AS NUMBER: 1330 OMMON NAME: XYLI | | O YES | YES | YES | МО | | |

AS OF THE DATE OF THIS MSDS, ALL OF THE COMPONENTS IN THIS

SECTION 15: REGULATORY INFORMATION

PRODUCT ARE LISTED (OR ARE OTHERWISE EXEMPT FROM LISTING) ON THE TSCA INVENTORY.
THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CPR (CONTROLLED PRODUCTS REGULATIONS) AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.

SECTION 16: OTHER INFORMATION

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA AVAILABLE AT THE TIME OF PREPARATION OF THIS DATA SHEET AND WHICH ICI PAINTS BELIEVES TO BE RELIABLE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THIS DATA. ICI PAINTS SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS INFORMATION, OR OF ANY PRODUCT, METHOD OR APPARATUS MENTIONED AND YOU MUST MAKE YOUR OWN DETERMINATION OF ITS SUITABILITY AND COMPLETENESS FOR YOUR OWN USE, FOR THE PROTECTION OF THE ENVIRONMENT, AND THE HEALTH AND SAFETY OF YOUR EMPLOYEES AND USERS OF THIS MATERIAL. COMPLIES WITH OSHA HAZARD COMMUNICATION STANDARD 29CFR1910.1200.